

The opinion in support of the decision being entered today
was **not** written for publication and
is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MAKOTO SANO, MASAYA MIYAZAKI

MAILED

APR 27 2005

U.S. PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Appeal No. 2004-2328
Application No. 09/215,555

HEARD APRIL 21, 2005

Before KRASS, BLANKENSHIP, and NAPPI, **Administrative Patent Judges**.

NAPPI, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 of the final rejection of claims 1 through 11 and 13 through 16 which constitute all the claims remaining in the application. For the reasons stated *infra* we will not sustain the examiner's rejection of claims 1 through 11 and 14 through 16, however, we sustain the examiner's rejection of claim 13. Additionally, we enter a new grounds of rejection against claims 1 through 11 and 16.

THE INVENTION

The invention relates to an image processing apparatus to perform a banding process for dividing objects to be printed across bands so that an image is directly drawn on a band buffer without the necessity of generating an intermediate language. See page 1 of appellants' specification.

Claim 1 is representative of the invention and is reproduced below:

An image processing apparatus, comprising:
reconstructing means for reconstructing print data for instructing contents of objects positioned in one page in band units that are obtained by dividing the page into a plurality of regions;
converting means for converting the data reconstructed by said reconstructing means into page description data that is in a page description language form; and
transmitting means for transmitting the page description language data, wherein the reconstructing means processes and distinguishes print data according to a type of the print data, and decides whether the band units to be reconstructed have common data.

THE REFERENCES

The references relied upon by the examiner are:

Dennis et al. (Dennis)	5,588,095	Dec. 24, 1996
Ramchandran	5,805,174	Sep 08, 1998
Sugiyama et al. (Sugiyama)	5,859,956	Jan 12, 1999

THE REJECTIONS AT ISSUE

Claims 1 through 6, 8 through 10 and 16 stand rejected under 35 U.S.C. § 103 as being obvious over Dennis. Claim 7 stands rejected under 35 U.S.C. § 103 as being obvious over Dennis in view of Sugiyama. Claims 11 through 15 stand rejected under 35 U.S.C. § 103 as being obvious over Dennis in view of Ramchandran.

Throughout the opinion we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

With full consideration being given to the subject matter on appeal, the examiner's rejections and the arguments of appellants and the examiner, for the reasons stated *infra* we will not sustain the examiner's rejection of claims 1 through 11, and 14 through 16 under 35 U.S.C. § 103. However, we sustain the examiner's rejection of claim 13 under 35 U.S.C. § 103.

At the outset, we note that appellants state, on page 4 of the brief:

For convenience and handling of this appeal, the claims are grouped as follows:

Group I:	Claims 1-11 and 16;
Group II:	Claim 13;
Group III:	Claim 14; and
Group IV:	Claim 15.

37 C.F.R. § 1.192(c) (7) (July 1, 2003) as amended at 62 Fed. Reg. 53196 (October 10, 1997), which was controlling at the time of appellants filing the brief, states:

For each ground of rejection which appellant contests and which applies to a group of two or more claims, the Board shall select a single claim from the group and shall decide the appeal as to the ground of rejection on the basis of that claim alone unless a statement is included that the claims of the group do not stand or fall together and, in the argument under paragraph (c) (8) of this section, appellant explains why the claims of the group are believed to be separately patentable. Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable.

We note that on page 11 of the brief, appellants argue claims 14 and 15 together. Accordingly, we group the claims into three groups, Group A consisting of claim 1 through 11 and 16 with claim 1 as the representative claim; Group B claim 13, and Group C claims 14 and 15 with claim 14 as representative of that group.

Rejection of claims in Group A (claims 1 through 11 and 16).

Appellants argue, on page 7 of the brief:

Firstly, Dennis et al. fails to disclose or suggest the positively recited feature of claims 1 and 16, particularly the converting means for converting the data reconstructed by the reconstructing means into page description language data that is in a page description language form.

Instead, Dennis et al. discloses that the data that is to be printed is stored within the host computer system in a page description language (PDL) format (see col. 3, lines 42-45). That is, Dennis et al. discloses that the print data is already in the PDL format in the host computer system, whereas the present claimed invention recites converting the reconstructed data into page description language data in the image processing apparatus.

In response, the examiner states, on page 10 of the answer:

Examiner maintains that Dennis teaches the claimed features because page description language format can be converted to PDL format after a reconstructing means has been performed. Dennis's system breaks up the printed page into segments/bands in the reconstruction step in order to reflect the order of the objects. Once that step is complete, the data is transferred to the printer for printing. Although the data may be stored in PDL format initially, it does not prohibit the stored data from being converted back into PDL format after the reconstructing means for the purpose of being transmitted and printed. See columns 9-10 of Dennis.

We disagree with the examiner's reasoning. Claim 1 includes the limitations of a "converting means for converting the data reconstructed by said reconstructing means into page description data language data that is in a page description language form." Claim 16 contains a similar limitation. We find that Dennis does not teach or suggest the limitation of a converting means. The examiner's statement that Dennis does not prohibit the stored data from being converted back into PDL form may be correct, however, we do not find that

Dennis' silence as to converting reconstructed data, provides objective evidence of a teaching or suggestion to perform the function of the claimed converting means. Accordingly, we will not sustain the examiner's rejection of claims 1 through 6, 8 through 10 and 16 as being unpatentable over Dennis.

On page 8 of the answer, the examiner rejects dependent claim 7 based upon Dennis as applied to claim 1 further in view of Sugiyama. On page 8 of the answer, the examiner rejects dependent claim 11 based upon Dennis as applied to claim 1 further in view of Ramchandran. As stated with respect to claim 1 we do not find that Dennis teaches the claimed converting means. The examiner does not assert, nor do we find, that either Sugiyama or Ramchandran teaches the claimed converting means. Accordingly, we will not sustain the examiner's rejection of claims 7 or 11.

Rejection of claim in Group B (Claim 13).

Appellants argue, on page 11 of the brief, that claim 13 is an output apparatus that corresponds to the device of claims 6 and 7. On page 12 of the brief, appellants argue:

[C]laim 13 relates to data transmission in an output apparatus when image data is divided into band units. The data transmission is operated so that data of a band unit is sent with attached data, which will not be printed in the band unit, but the data transmission is to clip the data to be printed in another band unit.

However, Ramchandran et al. specifically teaches away from the present invention because the present invention, described on pages 14, lines 1-16 discloses that the banding process in the image processing system is performed by the host computer so that the necessity for output apparatus to generate intermediate format data can be eliminated.

Accordingly, the memory for storing compressed image data until the raster development is performed after the banding process has been completed can be omitted. Because the process for compressing and expanding image data can be omitted, a high-quality image data can be obtained. Ramchandran et al. on the other hand, discloses that the image data must be compressed and stored until the raster development is performed after the banding process had been completed (see col.6, lines 40-47).

Further, on page 13 of the brief and on page 4 of the reply brief, appellants argue, that the examiner's motivation to combine the references is insufficient to support an obviousness rejection.

The examiner, in response, states, on page 13 of the answer:

As for Ramchandran teaching away from the present invention because the banding process is performed by the host computer in the present invention, Examiner maintains that the cited claim limitations do not cite this feature. The cited features of claim 13 simply state a raster converting means for converting PDL data into raster data.

Further, the examiner states, in the paragraph bridging pages 13 and 14:

Examiner's motivation for combining Dennis and Ramchandran stems from the fact that one of ordinary skill in the art at the time of the invention would recognize that the purpose of PDL is to identify objects such as shapes and text (as taught by Dennis) so that the raster converting means (Ramchandran) is carried out accordingly. Moreover, both Ramchandran and Dennis are of common technologies in image processing.

We concur with the examiner. We find no limitation in claim 13 directed to banding being performed on a host computer or that the compressing and expanding of data can be eliminated. We concur with the examiner's motivation to combine the references and find that the nature of the problem to be solved in Ramchandran also provides motivation to combine the references. Our

reviewing court has said “The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved.” *In re Huston* 308 F.3d 1267, 1278, 64 USPQ2d 1801, 1810 (Fed. Cir. 2002) (citing *In re Kotzab* 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000)).

Ramchandran teaches a image processing system which divides the data into bands and the bands are segmented into a plurality of zones. The objects are clipped into horizontal and vertical zones. (See abstract). Ramchandran teaches that clipping the image into zones allows the use of less memory for complex, high-resolution images. (See Column 4, lines 4-14). Thus, we find that the nature of the problem to be solved in Ramchandran provides the motivation to combine the teachings. Accordingly, we sustain the examiner’s rejection of claim 13.

Rejection of claims in Group C (Claims 14 and 15).

On page 11 of the brief, appellants argue that “Dennis et al. and Ramchandran et al., individually or in combination, fail to disclose or suggest the reconstructing means possessing and distinguishing print data according to a type of the print data, as recited in claims 14 and 15.”

In response, the examiner states, on pages 11 and 12 of the answer:

Dennis teaches that different shapes and graphical objects (i.e. different types of print data) require different reconstruction means. See column 6-8. In particular, Dennis addresses that shapes such as circles can not

be divided into horizontal bands easily and are represented by a series of geometric shapes. Thus, Dennis teaches distinguishing different types of print data.

We concur with appellants. We find that claims 14 and 15 include limitations directed to the reconstructing means distinguishing print data according to type of the print data and a converting means for converting the data into page description language. As discussed with respect to claim 1, we find that Dennis does not teach or suggest the claimed converting means. The examiner has not shown, nor do we find, that Ramchandran teaches or suggests the claimed converting means. Accordingly, we will not sustain the examiner's rejection of claims 14 and 15.

New grounds of rejection in accordance with 37 CFR § 41.50(b)

We find that independent claims 1 and 16 are ambiguous, and now enter a new grounds of rejection under 35 U.S.C. § 112, second paragraph. Claims are considered to be definite, as required by the second paragraph of 35 U.S.C. § 112, when they define the metes and bounds of a claimed invention with a reasonable degree of precision and particularity. **See *In re Venezia*, 530 F.2d 956, 958, 189 USPQ 149, 151 (CCPA 1976).** Independent claims 1 and 16 include the ambiguous limitation "reconstructing means for reconstructing print data for instructing contents of objects positioned in one page in band units that are obtained by dividing the page into a plurality of regions." We consider this limitation to be ambiguous as it is unclear as to what the reconstructing means'

reconstructed print data is instructing the contents of the object to do? We note that independent claim 14 includes a limitation directed to a reconstructing means, which clearly identifies the reconstructing means' function. At oral hearing, appellants' representatives were asked how this limitation should be interpreted and responded that the "instructing" has to do with the manipulation of the object that crosses band boundaries. When asked about the corresponding structure, appellants' representatives identified that in one embodiment it is item 110 of figure 2 and in another embodiment it is item 130 of figure 5. While, appellant may have intended claims 1 and 16 to include limitations directed to manipulating the object that crosses band boundaries, we do not find that claims 1 and 16 recite such a limitation in a clear manner. Accordingly, we now reject independent claims 1, 16 and dependent claims 2 through 11 under 35 U.S.C. § 112, second paragraph.

Conclusion

Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief or by filing a reply brief have not been considered and are deemed waived by appellants (see 37 CFR § 41.37(c)(vii)). Support for this rule has been demonstrated by our reviewing court in *In re Berger* 279 F3d 975, 984, 61 USPQ2d 1523, 1528-29 (Fed. Cir. 2002), wherein the Federal Circuit Court stated that because the appellants did not contest the merits of the

rejections in his brief to the Federal Circuit Court, the issue is waived. **See also** *In re Watts* 354 F.3d 1362, 1368, 69 USPQ2d 1453, 1458 (Fed. Cir. 2004).

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

We will not sustain the examiner's rejection of claims 1 through 11, and 14 through 16 under 35 U.S.C. § 103. However, we sustain the examiner's rejection of claim 13 under 35 U.S.C. § 103. The decision of the examiner is affirmed-in-part.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a) (1) (iv).

AFIRMED-IN-PART
37 CFR § 41.50(b)


ERROL A. KRASS
Administrative Patent Judge


HOWARD B. BLANKENSHIP
Administrative Patent Judge


ROBERT E. NAPPI
Administrative Patent Judge

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